June 5,

4. Descriptions of new Species of Zygænidæ and Arctiidæ. By HERBERT DRUCE, F.L.S., F.Z.S., &c.

[Received April 30, 1883.]

(Plates XXXIX. & XL.)

The following descriptions are all taken from specimens in my own collection, mostly collected in Ecuador by Mr. C. Buckley, to which are added a few others that I have found undescribed in working through this group of the Heterocera for the purpose of making out the Central-American species for the 'Biologia.' Many of the species of Zygænidæ are the most wonderful of all the Moths; in some cases they so closely resemble Hymenoptera, that at first sight it is almost impossible to determine to which order they belong. In the present paper I have described fifty new species, representing twenty-four genera.

Fam. ZYGÆNIDÆ.

EUPYRA, Herrich-Schäffer.

EUPYRA HERODES, n. sp. (Plate XXXIX. fig. 1.)

Wings uniform greenish black, slightly metallic along the costal margin of the primaries, a large hyaline patch crossed by the black veins close to the apex: head and thorax black; abdomen greenish; antennæ black, tipped with white; legs black; tarsi white.

Expanse 11 inch.

Hab. Ecuador, Sarayacu (Buckley).

This peculiar species is very unlike any other that I am acquainted with, and may at some future time prove to be a new genus; but as I have only seen a single specimen, I think for the present it is better placed in the genus *Eupyra*.

EUPYRA SALMONI, n. sp.

Primaries brownish black, thickly speckled with bright metallic green scales; four round hyaline spots, the first pair within the discoidal area, the second beyond and nearer the apex: secondaries black, with two elongated hyaline spots close to the base, and a round one beyond nearer the outer margin: head and thorax black; abdomen green, with a central black line; a white spot on the crown of the thorax, and one on each side of the abdomen close to the base; underside of abdomen white; legs white; tarsi black; antennæ black, slightly whitish at the tips.

Expanse 2 inches.

Hab. Colombia, Antioqua, Frontino (Salmon).

EUPYRA CEPHALENA, n. sp. (Plate XXXIX. fig. 2.)

Wings black ; primaries thickly powdered with bright green scales, a band of hyaline spots close to the apex, a small spot at the end of the cell and one below nearer the base; secondaries hyaline, the outer and inner margin broadly black: head and thorax black; abdomen bright greenish blue, the base and sides of abdomen white; legs black; antennæ black.

Expanse $1\frac{3}{4}$ inch.

Hab. Ecuador, Sarayacu (Buckley); Colombia, Antioqua (Salmon).

A beautiful species, allied to E. salmoni. The specimens from Antioqua are rather more highly coloured than the type.

CALONOTOS, Hübner.

CALONOTOS SANDION, n. sp.

Wings hyaline; primaries—the costal apex, outer and inner margins broadly black; a wide black band crossing the wing from the costal margin to uear the anal angle; the veins all black: secondaries black, the base and a small spot near the apex hyaline: head, antennæ, and thorax black; abdomen greenish black, the sides greenish white; legs black.

Expanse 2 inches.

Hab. Colombia, Ecuador, Sarayacu (Buckley).

Of this fine species I have only received a single specimen; it is allied to C. almon, Cramer.

CALONOTOS FLAVICORNIS, n. sp. (Plate XXXIX. fig. 3.)

Wings black; primaries crossed by two hyaline bands, the first about the middle, the second beyond nearer the apex, the nerves all black; secondaries hyaline, the inner and outer margins broadly black: head and thorax black; abdomen bright greenish blue; legs black; antennæ pale chrome-yellow.

Expanse 2 inches.

Hab. Colombia, Antioqua (Salmon).

A beautiful species, easily distinguished from all others by its pale yellow antennæ. I have also specimens of it from Ecuador sent by Mr. Buckley.

ISANTHRENE, Hübner.

ISANTHRENE EUSEBIA, n. sp.

Wings hyaline; primaries shaded with rich orange-yellow at the base and along the costal and inner margins, the outer margin and veins black, widened at the apex into a black spot; secondaries with the outer margin slightly black, widest at the anal angle: body yellow, banded with bluish black, the bands almost divided in the middle, forming spots; antennæ black, slightly yellowish at the tips; legs yellow.

Expanse 11 inch.

Hab. Ecuador, Sarayacu (Buckley).

This beautiful species comes nearest Isanthrene craboniformis, Staudinger.

ISANTHRENE THYESTES, n. sp. (Plate XXXIX. fig. 4.)

Wings hyaline, with the veins and outer margins black; head and thorax brownish black banded with yellow; abdomen yellow, crossed close to the base by a black band, the three last segments bright carmine; antennæ, legs, and underside of abdomen carmine, also the costal margin of the primaries.

Expanse $1\frac{3}{4}$ inch.

Hab. Ecuador, St. Lucia (Wolf).

This fine species is quite distinct from any that I am acquainted with, and has not any near ally.

ISANTHRENE TOLOSA, n. sp.

Wings hyaline; primaries with the costal and inner margins yellowish brown, outer margin and veins all black; secondaries with the outer margin black: head and front of thorax dark blue; thorax black; abdomen black, crossed at the base with a cream-coloured band; in some lights the abdomen is shot with bright blue; antennæ black at the base, brownish yellow near the tip.

Expanse $1\frac{1}{2}$ inch.

Hab. Ecuador, Intaj (Buckley).

This species resembles Gymnelia completa, Walker, to some extent, the black outer margins of the wings being very much narrower.

HOMEOCERA, Felder.

HOMEOCERA OZORA, n. sp. (Plate XXXIX. fig. 6.)

Wings hyaline, the base, outer margin, and veins black; head, thorax, and abdomen greenish black, the abdomen crossed by two orange-red bands, the first close to the base, the second beyond the middle; antennæ black, tipped with white.

Expanse 11 inch.

Hab. Colombia, Antioqua (Salmon).

This beautiful species is closely allied to Homeocera cressa, Felder, from which it differs chiefly in the bands across the abdomen.

HOMCOCERA BUCKLEYI, n. sp. (Plate XXXIX. fig. 5.)

Wings hyaline ; primaries—the base, a large square-shaped spot at the end of the cell, the apex, and a small spot close to the anal angle, the nerves, and outer margin all black ; two small white spots close to the base : secondaries—the outer and inner margins black : head, thorax, and abdomen greenish black, two orange-red spots bordered with white on the inner side close to the base of the thorax, and a row of orange-red spots on each side ; antennæ black, whitish at the tips ; legs black ; tarsi white.

Expanse 1³/₄ inch.

Hab. Ecuador, Intaj (Buckley).

This fine species is very distinct from any described, differing from all that I am acquainted with.

HOMCEOCERA LYRCEA, n. sp.

Wings pale hyaline, yellowish at the base, veins all black, the apex of the primaries slightly black; head and thorax black, spotted with yellow; abdomen black, banded with blue and yellow; antennæ black; legs yellow.

Expanse 11 inch.

Hab. Ecuador, Intaj (Buckley).

This species resembles to some extent *Homœocera ozora*, but is very distinct, the colour of the body being quite different.

ERRUCA, Walker.

ERRUCA LYCOPOLIS, n. sp. (Plate XXXIX. fig. 7.)

Wings yellowish hyaline; primaries with the costal and inner margins pale yellow, the veins all yellow, except close to the outer margin they are slightly dusky, all the outer margins slightly bordered with black : head and thorax black, spotted with blue; abdomen black, banded with yellow, and a series of blue spots down the middle enclosing two small yellow dots; antennæ yellow, rather dusky at the base.

Expanse $1\frac{3}{10}$ inch. Hab. Ecuador, Sarayacu (Buckley).

ERRUCA PHYLEIS, n. sp.

Wings hyaline; primaries with the costal half rich golden yellow, the outer margin slightly bordered with brown; secondaries—the outer margin black, widest at the anal angle: head, thorax, and abdomen brownish black, a narrow cream-coloured band crossing the abdomen near the base of the thorax, and a bluish-grey line on each side; antennæ yellow; legs black, with the tarsi light yellow.

Expanse $1\frac{3}{4}$ inch.

Hab. Ecuador, Sarayacu (Buckley).

This species is allied to *Erruca aterrima*, Walker, but can easily be distinguished from that species by the much narrower black margins to all the wings and the yellow on the primaries.

ERRUCA SEPHELA, n. sp.

Wings yellowish hyaline; primaries—the costal and inner margins yellow, the outer margin black, widest at the apex; secondaries—the outer margin black, the inner margin yellow: head, thorax, and abdomen yellow, banded with black; antennæ and legs yellow.

Expanse $1\frac{1}{4}$ inch.

Hab. Ecuador, Sarayacu (Buckley).

This species is most nearly allied to *Erruca hilaris*, Walker, but is very distinct.

SPHECOSOMA, Butler.

SPHECOSOMA SURRENTUM, n. sp. (Plate XXXIX. fig. 8.)

Wings dusky hyaline, outer margins and veins all black; head

and thorax yellow spotted with black; abdomen black; antennæ dark brownish black.

Expanse 1 inch.

Hab. Bolivia (Buckley).

This species resembles Sphecosoma testaceum, Walker, to some extent, but the black body clearly separates it from that species.

SPHECOSOMA ECUADORA, n. sp.

Wings hyaline; the costal margin of primaries red, extending almost to the apex, which is black; outer and inner margins very narrowly bordered with black: secondaries—the base pale yellow, the inner and outer margins slightly dusky : head, antennæ, front of thorax, and abdomen black; the base of thorax and three first segments banded with yellow; legs pale yellow; tarsi black.

Expanse $\frac{3}{4}$ inch.

Hab. Ecuador, Sarayacu (Buckley).

A small species allied to Sphecosoma angustata, Möschler.

LOXOPHLEBIA, Butler.

LOXOPHLEBIA EUMELIS, n. sp.

Wings yellowish hyaline; costal base and inner margin yellow; nerves black; outer margin black, widest at the apex: head, thorax, and abdomen black; a blue dot on the front of the head, and one at the base of the thorax; a central row of blue spots on each segment, and a row on each side of the abdomen; underside blue; autennæ black, finely pectinated.

Expanse $1\frac{1}{4}$ inch.

Hab. Ecuador, Intaj (Buckley).

LOXOPHLEBIA PETOSIRIS, n. sp.

Wings hyaline; base of primaries and inner margin of secondaries bright yellow; outer margin of all the wings narrowly bordered with black; apex of primaries broadly bordered with black: head and thorax black; abdomen yellow, banded with black, the three last segments shot with blue; antennæ black; legs bright yellow.

Expanse $1\frac{3}{10}$ inch.

Hab. Ecuador, Intaj (Buckley).

GYMNELIA, Walker.

GYMNELIA WHITELYI, n. sp.

This species is allied to *Gymnelia completa*, Walker, but differs from it in the following respects :—the marginal black bands are very much wider; the two cream-coloured spots are formed into a wide band at the base of the thorax; a series of narrow red bands cross the abdomen; and the anus is black instead of orange-red.

Expanse $1\frac{1}{2}$ inch.

Hab. East Peru (Whitely).

GYMNELIA TORQUATUS, n. sp.

Wings hyaline: primaries black for one third of length from the base; costal, outer, and inner margins black; apex broadly black; veins all black: secondaries black at the base, also the inner and outer margins: head, thorax, and basal half of the abdomen black, the anal half bright scarlet; antennæ black, tipped with white; legs black; tarsi spotted with white.

Expanse 2 inches.

Hab. South-east Brazil, Petropolis.

This fine species to some extent resembles *Dasysphinx mucescens*, Felder; it is much the largest species in the genus. I am indebted to Lord Walsingham for this interesting addition to my collection.

Cosmosoma, Hübner.

COSMOSOMA OMOLE, n. sp.

Wings hyaline; primaries the same as in C. confine, Her.-Schäf., except that they are black at the base instead of orange-red; secondaries yellow on the inner margin, but in all other respects the same as C. confine: head and front of thorax black; abdomen bright yellow, the last three segments brilliant bluish green; antennæ black; legs yellow; tarsi black.

Expanse 1 inch.

Hab. Ecuador, Sarayacu (Buckley).

This species is allied to *C. confine*, the wings being very much the same, the great difference being the yellow abdomen, instead of blue spotted with red.

Cosmosoma ufentina, n. sp.

Allied to *C. auge*, but the primaries rather longer and the black outer margin much wider; head black; thorax and abdomen yellow instead of bright red; the blue markings the same as in *C. auge*; antennæ black, the tips white; legs black.

Expanse $1\frac{3}{4}$ inch.

Hab. Bolivia (Buckley).

This is a very distinct species, allied to C. auge, Linn.

Dycladia, Felder.

DYCLADIA FELDERI, n. sp. (Plate XXXIX. fig. 9.)

Wings hyaline; primaries with the apex black, slightly yellow at the base; head, thorax, and abdomen pale sulphur-yellow; a central row of minute black spots commencing close to the thorax and terminating near the anus; antennæ black; legs pale yellow.

Expanse $1\frac{1}{10}$ inch.

Hab. Ecuador, Intaj (Buckley).

This species is allied to *Dycladia batesii*, Butler, from which it differs greatly in colour and extent of the black at the apex of the primaries. Specimens have lately been received from Mr. Champion, who obtained them in Guatemala.

DYCLADIA VINDONISSA, n. sp.

Wings sooty black; primaries hyaline from the base to the end of the cell; secondaries slightly hyaline at the base: head and antennæ black; thorax and basal half of the abdomen bright scarlet, the lower half on the upperside black, a series of small white spots on each side and several at the base; legs black.

Expanse $1\frac{1}{4}$ inch.

Hab. Ecuador, Sarayacu (Buckley).

DYCLADIA CRETHEIS, n. sp.

Wings black; primaries hyaline from the base to beyond the end of the cell, the costal and inner margins black; secondaries black, excepting the cell, which is slightly hyaline: head and antennæ black; thorax and the first segment of abdomen bright scarlet; abdomen black shot with bluish green; underside of thorax and legs black.

Expanse 1 inch.

Hab. Ecnador, Sarayacu (Buckley).

This species is allied to *D. militaris*, Butler, but without the black band crossing the primaries; it is easily distinguished from that species by its bright scarlet thorax.

DYCLADIA CHALONITIS, n. sp. (Plate XXXIX. fig. 10.)

Wings hyaline; primaries the same as in D. varipe, but not shaded with yellow as in that species; secondaries with the outer margin black: head, antennæ, thorax, and abdomen black; a red spot on each side of the thorax and one at the base of the abdomen; a row of greenish spots on the side of the abdomen, almost forming bands close to the anus; underside dusky white; legs all black.

Expanse 1 inch.

Hab. Ecuador, Sarayacu (Buckley).

This species resembles *D. varipe*, Walker, in pattern, but is very different in colour.

DESMIDOCNEMIS, Moschler.

DESMIDOCNEMIS ASMODEUS, n. sp.

Wings yellowish hyaline; primaries with the base and outer margin slightly black; the inner margin of secondaries yellow: head, thorax, and abdomen black; anus yellow; antennæ black.

Expanse $1\frac{1}{4}$ inch.

Hab. Ecuador, Sarayacu (Buckley).

DESMIDOCNEMIS EUMONIDES, n. sp.

Wings white hyaline; base, costal, outer, and inner margins black; a black band at the end of the cell, a small black spot below the cell near the inner margin: head, thorax, and abdomen black; antennæ black.

Expanse $1\frac{1}{10}$ inch.

Hab. Ecuador, Chiguinda (Buckley).

A beautiful little species, not nearly allied to any that I am acquainted with.

EUNOMIA, Hübner.

EUNOMIA OCINA, n. sp. (Plate XXXIX. fig. 11.)

Wings hyaline; the outer margins all black, the base of the primaries brilliant metallic blue, shading into black; a black band at the end of the cell; the outer margin of the secondaries very narrow: head, thorax, and antennæ black; abdomen above bright metallic blue, with a central row of white spots; the underside white; anus bright scarlet; legs black; tarsi white on the inner side.

Expanse $1\frac{3}{4}$ inch.

Hab. Bolivia (Buckley).

This beautiful species is very distinct from any described, but is allied to E. *eburneifera*, Felder, from which it differs in its larger size, narrow black margins of the wings, black thorax, and by wanting the blue at the base of the secondaries.

ARGYROEIDES, Butler.

ARGYROEIDES BOLIVIANA, n. sp. (Plate XXXIX. fig. 12.)

Wings hyaline, yellowish at the base of the primaries; nerves and outer margins black: head, thorax, and antennæ black; abdomen yellow banded with black; anus bright scarlet; legs yellow.

Expanse 1 inch.

Hab. Bolivia (Buckley).

A beautiful little species, very distinct from A. ophion, Walker.

PEZAPTERA, Butler.

PEZAPTERA CARMANIA, n. sp.

Wings hyaline; primaries—the apex and inner margin broadly black; secondaries—the outer margin black, widest at the anal angle: head, thorax, and abdomen above black, on the underside dusky white; antennæ black, tipped with white; legs black.

Expanse 1 inch.

Hab. Ecuador, Sarayacu (Buckley). A small species, allied to P. sordida, Walker.

TRICHURA, Hübner.

TRICHURA HADASSA, n. sp.

Wings yellowish hyaline; the outer and inner margins narrowly bordered with black: head, thorax, and abdomen black, spotted and streaked with green; antennæ and legs black; the underside of abdomen with a double row of white spots.

Expanse $1\frac{3}{4}$ inch.

Hab. Ecuador, Intaj (Buckley).

This species closely resembles T. aurifera, Butler, the great difference being that all the yellow markings of that species are bright metallic green in the one now described as in T. esmeralda.

CHLOROPSINUS, Butler.

CHLOROPSINUS VIRIDIS, n. sp.

Wings uniform greenish brown, with all the veins black; head, antennæ, and thorax black; abdomen greenish black; legs black; tarsi white on the inner side.

Expanse $1\frac{1}{2}$ inch.

Hab. Ecuador, Chiguinda (Buckley).

ILLIPULA, Walker.

ILLIPULA ORNATA, n. sp.

Primaries dark metallic green shaded with black, the apex and outer margin black; secondaries black: head, thorax, and abdomen bronze green, a row of four white spots on each side of the abdomen; antennæ and legs greenish black.

Expanse 2 inches.

Hab. Ecuador, Intaj (Buckley).

This species resembles Mastigocera cyanea, Butler.

Fam. ARCTIIDÆ.

CHARIDEA, Dalman.

CHARIDEA CLEASA, n. sp. (Plate XL. fig. 3.)

Primaries black, shot with dull green at the base; secondaries black, the base bright morpho blue, the outer margin slightly tinted with carmine: underside of primaries black, crossed beyond the middle with a bright carmine band; secondaries black, the base shot with green, the apex and outer margin broadly banded with carmine: head and front of thorax bright green; thorax black; abdomen on the upperside dark blue, on the underside bright carmine; antennæ and legs black.

Expanse $1\frac{1}{2}$ inch.

Hab. Colombia, Bogota (Chesterton).

This very beautiful species is allied to C. quadricolor, Felder, but is very distinct.

CHARIDEA IMPERIALIS, n. sp. (Plate XL. fig. 2.)

Primaries black, shot with bluish green at the base, a large central scarlet band crossing the wing from the costal margin to the anal angle; secondaries deep blue, the outer margin and apex black: head, thorax, and abdomen metallic blue; antennæ and legs black: underside the same as above.

Expanse 1 inch.

Hab. Ecuador, Chigninda (Buckley).

A beautiful species, belonging to the Eucyane group of Charidea.

CHARIDEA JULIA, n. sp.

Primaries black, shot with bright blue at the base, a rose-coloured band crossing the wings from the costal margin to the anal angle; secondaries bright blue, the apex slightly black : head, thorax, and abdomen black shot with blue; antennæ and legs black.

Expanse $l\frac{1}{2}$ inch.

Hab. East Peru, Chauchamayo (H. Whitely). A beautiful species, allied to C. imperialis.

CHARIDEA BUCKLEYI, u. sp. (Plate XL. fig. 4.)

Primaries rich brown, a red spot and a few green dots close to the base, the fringe pale yellow; secondaries blackish brown, crossed from the apex to near the inner margin by a carmine band divided into spots by the black nerves, the fringe yellow; head, thorax, and abdomen black; the abdomen crossed by a series of bright green bands; antennæ and legs black; the underside the same as above, with the addition of a red spot at the end of the cell of the primaries. The female the same as the male, only with more red on the hind wings.

Expanse 2 inches.

Hab. Ecuador, Sarayacu (Buckley).

A very distinct species, not nearly allied to any with which I am acquainted.

CHARIDEA BERTHA, n. sp. (Plate XL. fig. 1.)

Primaries brown, with a small red streak at the base; secondaries deep blue, the outer margin shaded with brown, a large carmine spot on the costal margin close to the apex: head, thorax, antennæ, and legs black banded with bright green; underside brown, both wings crossed by a central carmine band, the base slightly blue. The female only differs from the male in having more red on the hind wing.

Expanse 1³/₈ inch.

Hab. Ecuador, Sarayacu (Buckley).

CHARIDEA PERILLA, n. sp.

Primaries brown, a red spot at the base, and one beyond the cell near the apex; secondaries bright carmine, the onter and inner margins dark brown: head and thorax black shaded with blue; abdomen bright blue; underside brown; underside of wings bright carmine, slightly margined with brown.

Expanse $1\frac{3}{8}$ inch.

Hab. Ecuador, Sarayacu (Buckley).

This species is allied to *C. bertha*, but differs from it and all species known to mc.

CHARIDEA CHLOE, n. sp.

Primaries brown, the fringe yellow; secondaries brown, with a small red spot close to the apex; the fringe yellow: underside the same as above, except that all the wings are shot with green close to

26

PROC. ZOOL. SOC.—1883, No. XXVI.

the base ; head, thorax, and abdomen black, spotted and banded with bright green.

Expanse $1\frac{3}{8}$ inch. Hab. Ecuador, Chiguinda (Buckley). This species is allied to C. bertha.

DIABÆNA, Felder.

DIABÆNA IMITATA, n. sp.

This species closely resembles D. cincticollis, Felder; the primaries are the same; the secondaries are bright orange bordered with brown instead of white as in Felder's species; in other respects it does not differ.

Expanse $l_{\frac{1}{4}}$ inch.

Hab. Ecuador, Chiguinda (Buckley).

AUTOMOLIS, Hübner.

AUTOMOLIS SUPERBA, n. sp. (Plate XL. fig. 8.)

Primaries bright chrome-yellow, a small black spot at the apex, and one on the inner margin close to the anal angle; secondaries chrome-yellow, the abdominal margin deep yellow, the outer margin broadly black; head and underside of thorax black shot with greenish scales; thorax yellow; abdomen deep orange at the base, the lower half black banded with bright blue; the underside bright orange; antennæ and legs black.

Expanse $1\frac{6}{10}$ inch.

Hab. Ecuador, Sarayacu (Buckley).

This species is very distinct from any described, but comes nearest *A. ameoides*, Butler.

AUTOMOLIS ASARA, n. sp. (Plate XL. fig. 7.)

Primaries dusky ycllow; a brown spot near the base on the inner margin, and a slight spot at the anal angle extending to near the cell; secondaries yellowish white, the outer margin pale brown: head, thorax, and abdomen yellow; antennæ yellow at the base, and tip black in the middle; legs yellow; tarsi spotted with black.

Expanse $1\frac{1}{4}$ inch.

Hab. Ecuador, Sarayacu (Buckley).

ANDROCHARTA, Felder.

ANDROCHARTA CASSOTIS, n. sp. (Plate XL. fig. 11.)

Primaries rich dark brown; a slender carmine streak in the cell, and one from the base to near the anal angle; a wide oblique orange band near the apex; a small metallic blue spot at the end of the cell; secondaries very small, dark brown; head, thorax, and abdomen black; the sides of the abdomen spotted with metallic blue; antennæ black.

Expanse $1\frac{7}{10}$ inch.

Hab. Ecuador, Sarayacu (Buckley)

[June 5,

This species imitates *Histræa amazonica*, Butler, on the primaries, but the very small secondaries at once show that it is an *Andro-charta*.

Evius, Walker.

EVIUS POLYXENUS, n. sp. (Plate XL. fig. 6.)

Primaries reddish brown, a large \bigvee -shaped spot on the costal margin, a small one at the apex, and one on the hind margin yellow; secondaries yellow, the outer margin broadly brown: head yellow; thorax brown; abdomen brick-red; antennæ brown, yellow at the tips.

Expanse $1\frac{1}{4}$ inch.

Hab. Ecuador, Sarayacu (Buckley).

ZATREPHES, Hübner.

ZATREPHES CHAON, n. sp. (Plate XL. fig. 10.)

Primaries pale chrome-yellow; the base, inner margin, and apex red; a patch of metallic silver extending from the base along the inner margin; secondaries pale yellowish white shot with pink: head yellow; thorax and abdomen brownish red; antennæ and legs red.

Expanse $1\frac{1}{2}$ inch.

Hab. Ecuador, Sarayacu (Buckley).

This beautiful species is allied to Z. trailii, Butler.

ZATREPHES GRANDIS, n. sp. (Plate XL. fig. 5.)

Primaries orange-red, shaded with brown; a white spot at the base, and one below on the inner margin, a yellowish hyaline spot at the end of the cell, and an irregular hyaline band crossing from the costal margin near the apex to the anal angle; veins all black; secondaries yellowish hyaline, shaded with red on the inner margin: head, thorax, and abdomen orange-red; antennæ brown; legs red.

Expanse $2\frac{1}{2}$ inches.

Hab. Ecuador, Intaj (Buckley).

ZATREPHES BUCKLEYI, n. sp. (Plate XL. fig. 9.)

Primaries bright orange-yellow, crossed from the costal margin nearly to the middle by three bands of pale chrome-yellow edged with black; an elongated slate-coloured patch at the end of the cell extending nearly to the outer margin; a small black spot at the anal angle; secondaries pinkish white: head, thorax, and abdomen orange-yellow; antennæ and legs brown.

Expanse $1\frac{3}{4}$ inch.

Hab. Ecuador, Sarayacu (Buckley).

I have named this beautiful species after Mr. Buckley, being one of the many new species taken by him.

HOPLARCTIA, Butler.

HOPLARCTIA CLARIA, n. sp.

Primaries brownish black; a longitudinal streak from the base 26^*

through the cell to near the outer margin pale cream-colour; the inner margiu and the fringe cream-colour ; secondaries pale buff, in some specimens almost white, with the outer margin brownish black: head and thorax black; abdomen dark bluish green; antennæ black; legs metallic green.

Expanse $1\frac{1}{2}$ inch.

Hab. Ecuador, Chiguinda (Buckley).

This species is closely allied to H. nantana, Walker, its chief difference being the colour of the secondaries. I have a good series of specimens of both sexes before me ; they do not show the faintest trace of carmine in the hind wings.

EXPLANATION OF THE PLATES.

PLATE XXXIX.

Fig. 1. Eupyra herodes, p. 372.

2. —— cephalena, p. 372.

3. Calonotos flavicornis, p. 373.

4. Isanthrene thyestes, p. 374.

- 5. Homæocera buckleyi, p. 374.
- 6. ozora, p. 374.

Fig. 7. Erruca lycopolis, p. 375. 8. Sphecosoma surrentum, p. 375. 9. Dycladia felderi, p. 377. 10. — chalonitis, p. 378.

- 11. Eunomia ocina, p. 379.
- 12. Argyrocides boliviana, p. 379.

PLATE XL.

- Fig. 1. Charidea bertha, p. 381.
 - 2. imperialis, p. 380.

 - 3. clcasa, p. 380.
 4. buckleyi, p. 381.
 5. Zatrephes grandis, p. 383.

6. Evius polyxenus, p. 383.

Fig. 7. Automolis asara, p. 382.

- 8. <u>superba</u>, p. 382. 9. Zatrephes buckleyi, p. 383. 10. <u>chaon</u>, p. 383.
- 11. Androcharta eassotis, p. 382.

5. Note on the Variation of certain Species of Agrias. By F. D. GODMAN, F.R.S., and O. SALVIN, F.R.S.

[Received May 5, 1883.]

Since writing our paper on Agrias stuarti (P. Z. S. 1882, p. 338, t. 19), Mr. A. Maxwell Stuart has again visited the Amazons, and at Yquitos, where he captured the original type, has succeeded in taking four more specimens, three males and one female, of this magnificent Butterfly, all of which he has most generously placed in our collection.

Noticing considerable variation in the series thus acquired, and hearing that Dr. Staudinger had also recently received two specimens from his excellent collector, Dr. Hahnel, from Pebas on the Amazons, we wrote to the former gentleman asking him if he would kindly allow us to see his specimens. These, together with two of A. phalcidon, which will be referred to below, he has most obligingly sent us. Thus, with the type of A. beatifica in the British Museum and the female described in our paper from our own collection, we have before us seven males and two females of these insects.

The characters on which we relied in separating A. stuarti from A. beatifica were the greater extent of the purplish-blue colour at

384